

What is claimed is:

1. A method of correcting radial force variation of a tire comprising a tread portion and a carcass ply of radial structure containing rubberized organic fiber cords therein, which comprises measuring a radial force variation at room temperature to specify a tire position indicating a minimum value of the radial force variation, pushing and enlarging an inner face of the tread portion outward in a radial direction of the tire by a pushing means at a radial force variation bottom region sandwiching the position of the minimum value of the radial force variation from both sides thereof in a circumferential direction of the tread portion, and keeping such a push enlarged state for a given time.

2. The method according to claim 1, wherein the radial force variation bottom region is heated from room temperature to a given temperature and thereafter the inner face of the tread portion at the radial force variation bottom region is pushed and enlarged by the pushing means outward in the radial direction and cooling of the tire is started together with such a push enlarging to keep the push enlarged state for a given time under cooling.

3. The method according to claim 1, wherein the measured radial force variation is subjected to a Fourier waveform analysis to take a primary component waveform of radial force variation and the position of minimum value of the radial force variation and the radial force variation bottom region are specified from the primary component waveform.

4. The method according to claim 2, wherein the tire after the measurement of radial force variation is assembled onto a split rim and heated under an atmospheric pressure and a given internal pressure is filled in an inside of the tire after the completion of the heating and a pushing member as the pushing means fixed to either one segment of the split rim is displaced outward in the radial direction of the tire to push the inner face of the tread portion at the radial force variation bottom region.

5. The method according to claim 1, wherein a pushing force of the pushing member as a pushing means is maximum at the position of minimum value of the radial force variation in the tire and is gradually decreased from this position toward both sides thereof in the circumferential direction.

6. An apparatus for correcting radial force variation of a tire comprising a tread portion and a carcass ply of a radial structure containing rubberized organic

fiber cords therein, which comprises a split rim assembling the tire, a pushing means arranged on either one segment of the split rim, and a feed and discharge valve of a pressurized gas to an inside of the tire assembled onto the rim, in which a pushing member reciprocatively moving in a radial direction of the tire assembled onto the rim and pushing an inner face of the tread portion from an inside of the tire is arranged in the pushing means, and either one segment of the split rim is fixed to a main body of the apparatus and the other segment is connected to a moving means in an axial line direction of the rim displacing the rim between operation position and non-operation position in the assembling of the tire.

7. An apparatus according to claim 6, wherein the rim segment fixed to the main body of the apparatus is enclosed with a single-plane opening container having a volume capable of housing the tire to be assembled onto the split rim, and a lid covering an opening face of the container as a whole is arranged on the rim segment connected to the moving means in the axial line direction of the rim, and feed means and discharge means of heating gas and cooling gas are arranged in the container.

8. An apparatus according to claim 6, wherein the pushing means has a reciprocative moving means reciprocating the pushing member outward and inward in the radial direction of the tire, and the pushing member is provided on its outer surface with the same or approximate curve as the inner face of the tread portion.

9. An apparatus according to claim 8, wherein the reciprocative moving means is constructed with a pair of actuators extending in parallel to each other at a state of sandwiching the axial line of the rim provided with the pushing means.

10. An apparatus according to claim 8, wherein the reciprocative moving means in the pushing means comprises an actuator fixed to a projection portion of the rim provided with the pushing means and a pivoting arm hinging its one end portion to a central portion of the pushing member in the circumferential direction, and the other end portion of the pivoting arm is pivotably connected to the projection portion of the rim, and a top portion of an operation shaft of the actuator is hinged to a middle portion of the pivoting arm.

11. An apparatus according to claim 6, wherein the split rim is horizontally arranged so as to separate in up and down directions, and an upper rim segment is fixed to the main body of the apparatus and a lower rim segment is provided with the pushing means and the reciprocative moving means in the axial line direction of the rim.